

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference tp103553/mla		FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/FI 2005/050085	International filing date (day/month/year) 2005-03-16	Priority date (day/month/year) 2004-03-25	
International Patent Classification (IPC) or national classification and IPC See Supplemental Box			
Applicant Teliasonera Finland OYJ et al			

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 4 sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising:
 - a. ☒ (sent to the applicant and to the International Bureau) a total of 3 sheets, as follows:
 - ☐ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
 - ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
 - b. ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

<input checked="" type="checkbox"/>	Box No. I	Basis of the report
<input type="checkbox"/>	Box No. II	Priority
<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input type="checkbox"/>	Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/>	Box No. VI	Certain documents cited
<input type="checkbox"/>	Box No. VII	Certain defects in the international application
<input type="checkbox"/>	Box No. VIII	Certain observations on the international application

Date of submission of the demand 25-10-2005	Date of completion of this report 27-06-2006
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Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: Cover sheet

International patent classification (IPC)

H04L 12/56 (2006.01)

H04Q 7/38 (2006.01)

H04L 29/06 (2006.01)

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/FI 2005/050085

Box No. I Basis of the report

1. With regard to the **language**, this report is based on:

- ☒ the international application in the language in which it was filed
- ☐ a translation of the international application into _____,
which is the language of a translation furnished for the purposes of:
- ☐ international search (Rules 12.3(a) and 23.1(b))
- ☐ publication of the international application (Rule 12.4(a))
- ☐ international preliminary examination (Rules 55.2(a) and/or 55.3(a))

2. With regard to the **elements** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):*

- ☒ the international application as originally filed/furnished
- ☐ the description:
pages 1 - 7 as originally filed/furnished
pages* _____ received by this Authority on _____
pages* _____ received by this Authority on _____
- ☒ the claims:
pages _____ as originally filed/furnished
pages* _____ as amended (together with any statement) under Article 19
pages* 8 - 10 received by this Authority on 2005-10-25
pages* _____ received by this Authority on _____
- ☒ the drawings:
pages 1 as originally filed/furnished
pages* _____ received by this Authority on _____
pages* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to the sequence listing (*specify*): _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to the sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/FI 2005/050085

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	<u>1 - 11</u>	YES
	Claims		NO
Inventive step (IS)	Claims	<u>1 - 11</u>	YES
	Claims		NO
Industrial applicability (IA)	Claims	<u>1 - 11</u>	YES
	Claims		NO

2. Citations and explanations (Rule 70.7)

The documents D1 or D2 are regarded as being the closest prior art to the subject-matter of claims 1 and 5, and shows:

The subject-matter of claims 1 and 5 therefore differs from this known method and system in that the transmitting operator makes a dynamic query of the receiving operator, before forming a direct fixed connection, for the data of the network element required for the transmission.

The subject-matter of claims 1 and 5 is therefore novel (Article 33(2) PCT).

The problem to be solved by the present invention may therefore be regarded as functions in multi-operator network which make it possible to make a dynamic query to the private database of the receiving operator, which provides an answer on the properties of the required network element.

The solution to this problem proposed in claim 1 and 5 of the present application is considered as involving an inventive step (Article 33(3) PCT) for the following reasons:

Claims 2-4 and 6-11 are dependent on claim 1 and 5 as such also meet the requirements of the PCT with respect to novelty and inventive step.

The invention according to the claims 1-11 is industrial applicable.

Claims:

- 5 1. A method for transmitting a communication from a data transmission network (A) to a receiving data transmission network (B), which data transmission networks (A, B) are different to each others, where the communication is directed to the transmitting network element (I) in the receiving data transmission network (B) on the basis of this network address, **characterized** in that a first connection to the receiving data transmission network (B) is formed for querying the network address of the transmitting element (I) of the receiving data transmission network (B) from the private name server (PD) before directing the communication, after which the communication is directed to said network element.
- 10 15
- 20 2. The method according to claim 1, **characterized** in that said private domain name server (PD) comprises in a centralized manner, in addition to the network address in question, the transmission data of the other network elements of said receiving data transmission network.
- 25 3. The method according to claim 1 or 2, **characterized** in that a query is performed from the local name server (D) of the transmitting data transmission network to the local domain name server (PD) of the receiving data transmission network (B).
- 30 4. The method according to claim 3, **characterized** in that the network address data of both said private name server (PD) and the private name servers of other data transmission networks is maintained in said local name server (D).
- 35 5. A system for transmitting communication, which system comprises a transmitting data transmission network (A) and a receiving data transmission network (B), which data transmission networks (A, B) are different to each others, and means of directing communication from the transmitting data transmission

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- 5 network (A), as well as a transmitting network element (I) arranged in said receiving data transmission network (B) for receiving the communication, **characterized** in that the receiving data transmission network (B) comprises a private name server (PD), whereby the transmitting data transmission network (A) is arranged to form a first connection to the receiving data transmission network (B) in order to query the network address of the transmitting element (I) of the receiving data transmission network (B) from the private name server (PD) before directing the communication, whereby the transmitting data transmission network (A) is arranged to direct the communication to said network element.
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- 15 6. The system according to claim 5, **characterized** in that the transmitting data transmission network comprises a local name server (D), which is arranged to perform a query from said private name server (PD).
- 20 7. The system according to claim 5 or 6, **characterized** in that the private domain name server is a LDAP database.
- 25 8. The system according to claim 5 or 6 or 7, **characterized** in that at least one of the data transmission networks is an IMS data transmission network.
- 30 9. The system according to claim 8, **characterized** in that the transmitting network element is an I-CSCF contact point.
- 35 10. A name server (PD) for storing names, which name server (PD) is arranged in a data transmission network, **characterized** in that the name server is a private name server, which is arranged to verify, on the basis of the query from another data transmission network separate to said data transmission network, the transmission data of the desired network element and to return said transmission data to the querying party.

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11. The name server according to claim 10, **characterized** in that the name server is an LDAP database.

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